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FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 13:43:45 ON
06 APR 2003

L1 116 S PHOSPHORYCHOLINE?
L2 3 S L1 AND (C REACTIVE)

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W/COOK
4/6/03

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L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
AN 1973:122503 CAPLUS
DN 78:122503
TI Effect of **C-reactive** protein and blood-group
substances on tritium-labeled-thymidine incorporation into DNA of
leukocytes
AU Hokama, Y.; Paik, Y. P.; Yanagihara, E.; Kimura, L.
CS Sch. Med., Univ. Hawaii, Honolulu, HI, USA
SO RES: Journal of the Reticuloendothelial Society (1964-1973) (1973),
13(2), 111-21
CODEN: RESJAS; ISSN: 0033-6890
DT Journal
LA English
CC 15-13 (Immunochemistry)
AB The incorporation of thymidine-3H by leukocytes decreased in the presence
of **C-reactive** protein and the effect could be reversed
in the presence of **phosphorycholine**. It was suggested that
decreased incorporation was due to the binding of **C-**
reactive protein to the leukocyte surface.
ST **C reactive** protein leukocyte; thymidine leukocyte DNA;
phosphorylcholine thymidine leukocyte
IT Proteins
RL: BIOL (Biological study)
(**C-reactive**, DNA formation inhibition by, in
leukocyte)
IT Leukocyte
(DNA formation by, **C-reactive** protein effect on)
IT Deoxyribonucleic acids
RL: BIOL (Biological study)
(formation inhibition of, by **C-reactive** proteins,
in leukocyte)

=>

2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:114222 CAPLUS
 DN 112:114222
 TI Binding specificity of human **C-reactive** protein by
 using affinity chromatography
 AU Kishida, Takuya; Kuwajima, Shirou; Noda, Tadafumi; Izumi, Yoshihito; Naka,
 Keiichi; Matsui, Tadashi; Okuda, Kiyoshi
 CS Med. Sch., Osaka City Univ., Osaka, Japan
 SO Ensho (1989), 9(5), 369-74
 CODEN: ENSHEE; ISSN: 0389-4290
 DT Journal; General Review
 LA Japanese
 CC 6-0 (General Biochemistry)
 AB A review with 39 refs. Clin. and biol. aspects, esp. immunol. ones, of
 human **C-reactive** protein (CRP) were studied. Some of
 them were ascribed to its capacity of ligand-binding with
phosphorycholine (PC) Ca-dependently. While type 4 pneumococcal
 polysaccharide, which lacks phosphate and choline, has been pointed out to
 be able to bind human CRP in Ca-dependent manner, ligands other than PC
 should be considered. Specific affinity chromatog. with neg.-charged
 aminocaproic acid binds human CRP Ca-dependently, being almost comparable
 to PC-affinity chromatog. In addn., another specific ligand of
 pos.-charged aminoethyl-agarose binds human CRP Ca-independently. These
 new ligands may provide simple models for understanding human CRP .
 ST **C reactive** protein ligand binding review
 IT Molecular association
 (of **C-reactive** proteins of human with ligands,
 specificity of)
 IT Proteins, specific or class
 RL: BIOL (Biological study)
 (**C-reactive**, aminocaproate and aminoethyl-agarose
 interaction with, of human)
 IT 1319-82-0, Aminocaproic acid 58856-73-8
 RL: PROC (Process)
 (**C-reactive** protein of human binding of)
 L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS

L2 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 1992:49588 BIOSIS
 DN BA93:29563
 TI ISOLATION OF A PHOSPHORYLCHOLINE-BINDING PROTEIN FROM THE HEMOLYMPH OF THE
 SNAIL ACHATINA-FULICA.
 AU MANDAL C; BISWAS M; NAGPURKAR A; MOOKERJEA S
 CS DEP. VET., MICROBIOL. PARASITOL., TEX. A AND M UNIV., COLLEGE STATION,
 TEX. 77843-4467.
 SO DEV COMP IMMUNOL, (1991) 15 (4), 227-240.
 CODEN: DCIMDQ. ISSN: 0145-305X.
 FS BA; OLD
 LA English
 AB A phosphorylcholine-binding protein from the hemolymph of the snail
 Achatina fulica was purified to near homogeneity using a Sepharose
 phenylphosphorylcholine affinity column. The protein bound to the affinity
 column was eluted with 5 mM phosphorylcholine as a single symmetrical
 peak. The purified protein (400 Kda) contained 35-40% carbohydrate. On
 SDS-PAGE the protein separated into two bands of 20 and 24 Kda, and had a
 pI of 5.9. On immunodiffusion, antiserum to the snail phosphorylcholine
 binding protein did not cross-react against other phosphorylcholine
 binding proteins, like rat serum phosphorylcholine-binding protein (PCBP),
 Limulus C-reactive protein (CRP), or human CRP. On
 pretreatment of the snail hemolymph with this antiserum, the
 hemagglutination titer of the hemolymph was markedly decreased. The
 purified snail phosphorylcholine binding protein agglutinated rabbit
 erythrocytes in the absence of divalent cation (Ca²⁺) but traceamount of
 Ca²⁺ increased its binding. The strongest inhibitor of the agglutination
 reaction was lactose, followed by melibiose and 2-deoxygalactose. The
 relationships of the snail **phosphorylcholine** binding protein to
 other hemolymph agglutinins and to CRPs are discussed in light of common
 phylogeny.
 CC Evolution 01500
 Cytology and Cytochemistry - Animal 02506
 Clinical Biochemistry; General Methods and Applications *10006
 Comparative Biochemistry, General 10010
 Biochemical Methods - Proteins, Peptides and Amino Acids 10054
 Biochemical Methods - Carbohydrates 10058
 Biochemical Studies - General 10060
 Biochemical Studies - Proteins, Peptides and Amino Acids *10064
 Biochemical Studies - Carbohydrates *10068
 Biophysics - General Biophysical Techniques 10504
 Biophysics - Molecular Properties and Macromolecules *10506
 Metabolism - General Metabolism; Metabolic Pathways *13002
 Metabolism - Carbohydrates *13004
 Metabolism - Proteins, Peptides and Amino Acids *13012
 Blood, Blood-Forming Organs and Body Fluids - Blood and Lymph Studies
 15002
 Blood, Blood-Forming Organs and Body Fluids - Blood Cell Studies *15004
 Blood, Blood-Forming Organs and Body Fluids - Other Body Fluids 15010
 Immunology and Immunochemistry - Immunohematology, Blood Groups *34506
 Immunology and Immunochemistry - Immunopathology, Tissue Immunology
 *34508
 Invertebrata, Comparative and Experimental Morphology, Physiology and
 Pathology - Mollusca *64026
 Invertebrata, Comparative and Experimental Morphology, Physiology and
 Pathology - Arthropoda - Chelicerata 64060
 BC Gastropoda 61200
 Merostomata 75404
 Leporidae 86040
 Hominidae 86215
 Muridae 86375
 IT Miscellaneous Descriptors
 LIMULUS-POLYPHEMUS HUMAN RAT RABBIT ERYTHROCYTE AGGLUTINATION METHOD

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 pretreatment of the snail hemolymph with this antiserum, the
 hemagglutination titer of the hemolymph was markedly decreased. The
 purified snail phosphorylcholine binding protein agglutinated rabbit
 erythrocytes in the absence of divalent cation (Ca+2) but traceamount of
 Ca+2 increased its binding. The strongest inhibitor of the agglutination
 reaction was lactose, followed by melibiose and 2-deoxygalactose. The
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